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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/520,358 | 06/23/2005 | Andreas Barth | 510.1122 | 5923 |
| 23280 7590 11/12/2008 Davidson, Davidson & Kappel, LLC 485 7th Avenue 14th Floor New York, NY 10018 | | | | |
| EXAMINER | | | | |
| IP, SIKYIN | | | | |
| ART UNIT | | PAPER NUMBER | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,358

Applicant(s)

BARTH, ANDREAS

Examiner

Sikyin Ip

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 8/21/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP T644006 to Couling or USP 6467527 to Kubota.

Couling discloses the features including a die cast magnesium based composition (last paragraph). Kubota discloses the features including a cold chamber die cast magnesium based composition (col. 3, lines 25-67) to form engines (col. 1, lines 5-13).

The mold is kept at 150 to 350°C. The molten magnesium alloy is cast from melting temperature 650 to 750°C to cold mold at 150 to 350°C. This is considered quenching because quenching rate has not been disclosed. Moreover, quenching is process limitation which fails to define any product property. Especially, different quenching rate would produce different properties and microstructure. Moreover, the invention defined in a product-by-process claim is a product, not a process. In *re* Bridgeford, 357 F. 2d 679, 149 USPQ 55 (CCPA 1966) and MPEP § 2113. It is the patentability of the product claimed and not of the recited process steps which must be established. See In *re* Brown, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972). Therefore, when prior art compounds essentially "bracketing" the claimed compounds in structural similarity are all known, one of ordinary skill in the art would clearly be motivated to make those claimed compounds in searching for new products in the expectation that compounds similar in structure will have similar properties. In *re* Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); See In *re* May, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and In *re* Hoch, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166 USPQ 406, 409 (1970). As stated in In *re* Peterson, 315 F.3d 1325, 1329-30, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003), that "A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art". Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. Also see MPEP § 2131.03 and § 2123.

Response to Arguments

Applicant's arguments filed July 17, 2008 have been fully considered but they are not persuasive.

~~It is respectfully submitted that~~ neither Couling nor Kubota et al. discloses water quenched magnesium/aluminum die casting alloy. ~~It is respectfully submitted that, contrary to~~ Applicant argues that “quenched magnesium/aluminum die casting alloy.”

But, the invention defined in a product-by-process claim is a product, not a process. In re Bridgeford, 357 F. 2d 679, 149 USPQ 55 (CCPA 1966) and MPEP § 2113. It is the patentability of the product claimed and not of the recited process steps which must be established. See In re Brown, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972). The guidance that has been provided by court on this matter is

[i]f the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

See In re Thorpe, 777 F.2d 695, 227 USPQ 964, 966 (Fed. Cir. 1985). When applicant's and prior art's products are to be identical or substantially identical, the burden shifts to applicant to provide evidence that the prior art product does not inherently possess the claimed properties. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977); In re Fessmann, 489 F.2d 742, 745 180 USPQ 324, 326 (CCPA 1974); and In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980).

Furthermore, “water quenched,” as recited in claim 14, limits the device as recited in claim 14 because a water quenched alloy has distinctive structural characteristics compared to other alloys. (See MPEP 2113). Such characteristics are discussed in the present application, for

Applicant argues that “example, at paragraphs [0013] and [0014].”

But, recited “water quenched”, without disclosing heated product temperature, water bath temperature, quenching rate, and finish-quenching temperature, does not define

any structure. Instant paragraphs [0013] and [0014] in specification do not define any definite structure/property. Moreover, limitation in specification can not be read in the claims.

Applicant's argument with respect to 132 declaration is noted. But, it is immaterial because the quenching rates and conditions such as heated product temperature, water bath temperature, quenching rate, and finish-quenching temperature by air and water have not been disclosed. Moreover, the products in declaration are further aged – not just water quenching as claimed.

~~It is also respectfully submitted that neither Couling nor Kubota et al. discloses "Zn less than 0.20 % by weight; Cr less than 100 ppm; Ni less than 20 ppm; and Fe less than 50 ppm," as~~

Applicant argues that "~~Kubota et al. discloses a balance of invisible impurities (Abstract), but there~~"

But, said elements' contents include zero which reads on optional elements.

~~With further respect to claim 18, it is respectfully submitted that neither Couling nor Kubota et al. discloses "the die casting alloy is a MgAl 3 Si 1 alloy," as recited in claim 18, nor~~

Applicant argues that "~~does the Office Action address this limitation.~~"

Applicant's attention is directed to the rejection above, that claim 18 is included in the rejection for the same reason as other claims. The Mg based alloy composition in claim 18 is included in Kubota (col. 3, lines 25-67), for example, as set forth in the rejection above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121; 37 C.F.R. Part §41.37 (c)(1)(v); MPEP §714.02; and MPEP §2411.01(B).

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Thursday from 5:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sikyin Ip/
Primary Examiner, Art Unit 1793

November 9, 2008

Application Number**Application/Control No.**

10/520,358

**Applicant(s)/Patent under
Reexamination**

BARTH, ANDREAS

Examiner

Sikyin Ip

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